

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C. 20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 23 October 2000 (23.10.00)	
International application No. PCT/US00/05509	Applicant's or agent's file reference FP-LX 4012
International filing date (day/month/year) 02 March 2000 (02.03.00)	Priority date (day/month/year) 03 March 1999 (03.03.99)
Applicant NELSON, Eric, M. et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
20 September 2000 (20.09.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer <p style="text-align: center;">R. E. Stoffel</p> Telephone No.: (41-22) 338.83.38
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PATENT COOPERATION TREATY

PCT

REC'D 26 JAN 2001

WIPO PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

15

Applicant's or agent's file reference P 54857	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/05509	International filing date (day/month/year) 02/03/2000	Priority date (day/month/year) 03/03/1999
International Patent Classification (IPC) or national classification and IPC G01N33/52		
Applicant LXN CORPORATION et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 20/09/2000	Date of completion of this report 23.01.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer GONCALVES M L F C Telephone No. +49 89 2399 8127 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/05509

I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).):*

Description, pages:

1-14 as originally filed

Claims, No.:

1-7 as originally filed

Drawings, sheets:

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/05509

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims 1-7
	No: Claims
Inventive step (IS)	Yes: Claims 1-7
	No: Claims
Industrial applicability (IA)	Yes: Claims 1-7
	No: Claims

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/05509

Section V

1. Reference is made to the following document:
D1: EP 0 215 419
2. The subject-matter of claim 1 is a method for controlling the adsorption of a liquid sample through an absorbent layer, comprising the steps a) and b). Such a method is not disclosed in the known prior art documents and thus the subject-matter of claim 1 fulfils the requirements of Article 33(2) PCT .
3. The closest prior art is considered to result from D1. This document discloses a flow metering capillary device for controlled fluid flow, which comprises 2 oppositely disposed surfaces defining a capillary zone of intended liquid transport, the surfaces being spaced apart at a distance no greater than which will maintain a capillary flow of liquid. One of the surface layers constitutes a top layer and the other retains interactive material capable of reacting with a component of a test liquid to provide a detectable response. The test liquid is introduced between the surfaces and the oppositely disposed surfaces have formed between them a sample test chamber and an overflow chamber where the chambers are connected by a channel to convey excess test liquid from the test liquid introducer to the overflow chamber (see claims and figures). The device in D1 provides for a rapid and uniform distribution of a predetermined volume of a liquid test specimen onto the reactive surface. No exchange can occur between liquid in the sample chamber and liquid in the overflow chamber because of the creation of an air gap in the overflow.

The method of claim 1 distinguishes itself from the disclosure in D1 by providing an air gap between the absorbent layer and the viewing surface.

This differentiating feature results in that the method of the invention controls the adsorption of the sample by the adsorbent layer (providing for an uniform distribution of a the sample onto the reactive/absorbent surface) and additionally reduces the effect of haematocrit. Due to the this unexpected effect, the presence of an inventive step can be acknowledged (Article 33(3) PCT).

4. The dependent claims 2 and 3 add features to the method of claim 1 and thus also relate to novel and inventive subject-matter (Articles 33(2) and (3) PCT).
5. The above comments also apply to the subject-matter of claim 4, referring to a novel

apparatus for the performance of the method of claim 1 (comprising an absorbent layer, at least one side wall and a translucent window, wherein the absorbent layer, the walls and the window define an air gap), and to the claims 5-7 dependent thereon (Articles 33(2) and (3) PCT).

Section VII

1. In order for the application to be self-contained (see further Guidelines, C-II, 4.17), the references to non-published patent applications should have been changed to published publication numbers throughout the application.
2. The incorporation of prior art by reference is not allowed as the PCT application should be self-contained (see further Guidelines, C-II, 4.17). The phrase "...incorporated by reference herein." to be found e.g. on page 6 (line 7) should therefore have been deleted.

Section VIII

1. The reference to the spirit of the invention should have been deleted on page 14, last paragraph of description (Article 6 PCT and the guidelines C-III, 4.3a).

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/05509

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N33/52 B01L3/00 G01N33/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N B01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 215 419 A (MILES LAB) 25 March 1987 (1987-03-25) *see detailed description of the invention* claims; figures ---	1-7
A	US 5 695 949 A (BURD JOHN F ET AL) 9 December 1997 (1997-12-09) cited in the application claims; figures ---	1-7
A	US 5 470 752 A (BURD JOHN F ET AL) 28 November 1995 (1995-11-28) cited in the application ---	1-7
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

14 July 2000

Date of mailing of the international search report

01/08/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

GONCALVES M L F C

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/05509

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 597 532 A (CONNOLLY JAMES) 28 January 1997 (1997-01-28) cited in the application claims; figures ---	1-7
A	US 6 024 919 A (NELSON ERIC M ET AL) 15 February 2000 (2000-02-15) see abstract claims; figures -----	1-7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/05509

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0215419 A	25-03-1987	AU 568989 B	14-01-1988
		AU 6270086 A	19-03-1987
		CA 1292176 A	19-11-1991
		DE 3679264 D	20-06-1991
		JP 1852481 C	21-06-1994
		JP 5069373 B	30-09-1993
		JP 62069139 A	30-03-1987
		US 4761381 A	02-08-1988
US 5695949 A	09-12-1997	CA 2215914 A	10-10-1996
		EP 0819180 A	21-01-1998
		JP 11503025 T	23-03-1999
		WO 9631619 A	10-10-1996
		US 6027692 A	22-02-2000
US 5470752 A	28-11-1995	EP 0767909 A	16-04-1997
		JP 10507513 T	21-07-1998
		WO 9600897 A	11-01-1996
US 5597532 A	28-01-1997	DE 69511533 D	23-09-1999
		DE 69511533 T	27-04-2000
		EP 0750739 A	02-01-1997
		WO 9613707 A	09-05-1996
US 6024919 A	15-02-2000	NONE	

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference FP-LX 4012	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 00/05509	International filing date (day/month/year) 02/03/2000	(Earliest) Priority Date (day/month/year) 03/03/1999
Applicant LXN CORPORATION et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

METHOD AND APPARATUS FOR CONTROLLING THE ADSORPTION OF A LIQUID SAMPLE THROUGH AN ABSORBENT LAYER

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☒ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

3

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/05509

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N33/52 B01L3/00 G01N33/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N B01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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A ✓	US 5 470 752 A (BURD JOHN F ET AL) 28 November 1995 (1995-11-28) cited in the application ---	1-7
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

14 July 2000

Date of mailing of the international search report

01/08/2000

Name and mailing address of the ISA

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Fax: (+31-70) 340-3016

Authorized officer

GONCALVES M L F C

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/05509

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	2 ✓ US 5 597 532 A (CONNOLLY JAMES) 28 January 1997 (1997-01-28) cited in the application claims; figures ---	1-7
A	2 ✓ US 6 024 919 A (NELSON ERIC M ET AL) 15 February 2000 (2000-02-15) see abstract claims; figures -----	1-7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/05509

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			AU 6270086 A	19-03-1987
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			DE 3679264 D	20-06-1991
			JP 1852481 C	21-06-1994
			JP 5069373 B	30-09-1993
			JP 62069139 A	30-03-1987
			US 4761381 A	02-08-1988

US 5695949	A	09-12-1997	CA 2215914 A	10-10-1996
			EP 0819180 A	21-01-1998
			JP 11503025 T	23-03-1999
			WO 9631619 A	10-10-1996
			US 6027692 A	22-02-2000

US 5470752	A	28-11-1995	EP 0767909 A	16-04-1997
			JP 10507513 T	21-07-1998
			WO 9600897 A	11-01-1996

US 5597532	A	28-01-1997	DE 69511533 D	23-09-1999
			DE 69511533 T	27-04-2000
			EP 0750739 A	02-01-1997
			WO 9613707 A	09-05-1996

US 6024919	A	15-02-2000	NONE	
